

**BUILDING STANDARDS COMMISSION**

2525 Natomas Park Drive, Suite 130  
Sacramento, California 95833-2936  
(916) 263-0916 FAX (916) 263-0959



June 21, 2019

David De Cordova  
Principal Planner  
Community and Economic Development  
City of Carlsbad  
1635 Faraday Avenue  
Carlsbad, CA 92008

RE: Ordinance No. CS-349

Dear Mr. De Cordova:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your office on 3/14/19.

Our review finds the submittal to contains one ordinance modifying provisions of the 2016 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code Sections 17958.7 and 18941.5. The code modifications are accepted for filing and are enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the California Building Standards Commission (CBSC). CBSC is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with CBSC in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code Section 13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than CBSC. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code Section 25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

A handwritten signature in purple ink, reading "Enrique M. Rodriguez", is written over the typed name.

Enrique M. Rodriguez  
Associate Construction Analyst

cc: CBSC Chron  
Local Filings

**Rodriguez, Enrique (CBSC)@DGS**

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**From:** David de Cordova <David.deCordova@carlsbadca.gov>  
**Sent:** Thursday, March 14, 2019 2:26 PM  
**To:** OrdinanceFilings@DGS  
**Cc:** Mike Peterson; Mike Grim; Michael Arvizu (Michael.Arvizu@energycenter.org); Christie Marcella  
**Subject:** City of Carlsbad Local Amendment to 2016 CalGreen re: Electric Vehicle Charging  
**Attachments:** CS-349signed.pdf; EV covltr to CBSC031419.pdf

Hello,

Attached please a copy of Ordinance No CS-349, codifying local amendments to the 2016 California Green Building Standards Code relative to electric vehicle charging requirements.

Please contact me if you have any questions regarding this filing.

Thank you.



David de Cordova  
Principal Planner  
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760-602-4604 direct | [david.decordova@carlsbadca.gov](mailto:david.decordova@carlsbadca.gov)



March 14, 2019

Via email to: [ordinancefilings@dgs.ca.gov](mailto:ordinancefilings@dgs.ca.gov)

California Building Standards Commission  
2525 Natomas Park Drive, Suite 130  
Sacramento, CA 95833

**SUBJECT: Filing of City of Carlsbad local amendments and findings to the 2016 California Green Building Standards Code relative to electric vehicle charging**

To Whom It May Concern,

Enclosed please find a copy of the adopted Ordinance No. CS-349, codifying the City of Carlsbad local amendments to the 2016 California Green Building Standards Code relative to electric vehicle charging requirements. Express findings as required by Health & Safety Code Sections 17958.5, 17958.7 and 18941.5 are included in the attached ordinance.

If you have any questions about this filing, please contact me by email at [David.decordova@carlsbadca.gov](mailto:David.decordova@carlsbadca.gov) or by phone at (760) 602-4604.

Sincerely,

DAVID DE CORDOVA  
PRINCIPAL PLANNER

DDC:mf:

Attachments: Ordinance No. CS-349

c: Don Neu, City Planner  
Mike Peterson, Building Services Manager  
Mike Grim, Climate Action Plan Administrator  
File Copy

**ORDINANCE NO. CS-349**

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CARLSBAD, CALIFORNIA, AMENDING CARLSBAD MUNICIPAL CODE CHAPTER 18.21 REGARDING REQUIREMENTS FOR ELECTRIC VEHICLE CHARGING INFRASTRUCTURE FOR NEW AND EXISTING RESIDENTIAL BUILDING SITES AND NEW NONRESIDENTIAL BUILDING SITES.

**PROJECT NAME: CLIMATE ACTION PLAN ORDINANCES**

**PROJECT NUMBER: MCA 17-0002 (PUB17Y-0013)**

WHEREAS, on September 22, 2015, the City Council of the City of Carlsbad approved Resolution No. 2015-244, approving the Climate Action Plan (CAP) which aims to reduce communitywide greenhouse gas emissions (GHG); and

WHEREAS, in connection with approval of the CAP, the City Council certified a program environmental impact report (EIR 13-02) in compliance with the California Environmental Quality Act (CEQA), which evaluated the potential environmental effects of CAP implementation, including adoption and enforcement of various ordinances and programs intended to reduce GHG; and

WHEREAS, this ordinance fulfills a CAP requirement to address electric vehicle charging infrastructure measures for new and existing residential building sites and new nonresidential building sites (CAP measure L-5 and L-6); and

WHEREAS, the City Planner has determined that: 1) adoption of this ordinance is a subsequent activity of the CAP for which program EIR 13-02 was prepared; 2) a notice for the activity has been given, which includes statements that this activity is within the scope of the program approved earlier, and that program EIR 13-02 adequately describes the activity for the purposes of CEQA Section 15168(c)(2) and (e); 3) the project has no new significant environmental effect not analyzed as significant in the prior EIR 13-02; and 4) none of the circumstances requiring a subsequent or a supplemental EIR under CEQA Guidelines Sections 15162 or 15163 exist; and WHEREAS, CAP actions to reduce GHG require adoption of ordinances addressing alternative water heating systems for new residential buildings; and

WHEREAS, California Health and Safety Code section 17958 requires that cities adopt building regulations that are substantially the same as those adopted by the California Building Standards Commission and contained in the California Building Standards; and

WHEREAS, the California Green Building Standards Code is a part of the California Building Standards which contains mandatory green building provisions, including residential and nonresidential site planning and design requirements for electric vehicle charging; and,

and townhouses with attached private garages, do not include an electrical service panel upgrade, the requirements of Section 4.106.4.1 shall apply to the maximum extent that does not require an electrical service panel upgrade.

4. In major residential renovations, where there is evidence substantiating that meeting the requirements of this section presents an unreasonable hardship or is technically infeasible, the Building Official may consider an appeal from the project sponsor to reduce the number of EV spaces required or provide for EV charging elsewhere.

**4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages and major residential renovations.** For each dwelling unit, install one EVSE Ready space.

**4.106.4.1.1 Identification.** The service panel or subpanel circuit directory shall identify the overcurrent protective device designated for future EV charging purposes as "EV READY" in accordance with the California Electrical Code. The receptacle or blank cover shall be identified as "EV READY".

**4.106.4.2 New multifamily dwellings and major residential renovations.** If residential parking is available, ten (10) percent of the total number of parking spaces on a building site provided for all types of parking facilities shall be electric vehicle charging spaces (EV spaces) capable of supporting installed and future EVSE. Calculations for the required number of EV spaces and EVSE Installed spaces shall be rounded up to the nearest whole number.

**Note:** Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging. Except for EVSE Installed spaces, there is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

**4.106.4.2.1 Electric vehicle charging space (EV space) locations.** Construction documents shall indicate the location of proposed EV spaces. Where common use parking is provided at least one EVSE Installed space shall be located in the common use parking area and shall be available for use by all residents.

**4.106.4.2.1.1 Electric vehicle charging stations (EVCS).** When EV chargers are installed, EV spaces required by Section 4.106.4.2.2, Item 3, shall comply with at least one of the following options:

1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The EV space shall be located on an accessible route, as defined

**4.106.4.3 New hotels and motels.** All newly constructed hotels and motels shall provide EV spaces capable of supporting installed and future installation of EVSE. The construction documents shall identify the location of the EV spaces.

**Note:** Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging. Except for EVSE Installed spaces, there is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

**4.106.4.3.1 Number of required EV spaces.** The number of required EV spaces and EVSE Installed spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1. Calculations for the required number of EV spaces and EVSE Installed spaces shall be rounded up to the nearest whole number.

**TABLE 4.106.4.3.1**

<b>TOTAL NUMBER OF PARKING SPACES</b>	<b>NUMBER OF REQUIRED EV SPACES</b>	<b>NUMBER OF REQUIRED EVSE INSTALLED SPACES</b>
0-9	1	1
10-25	2	1
26-50	4	2
51-75	6	3
76-100	9	5
101-150	12	6
151-200	17	9
201 and over	10 percent of total	50 percent of required EV spaces

**4.106.4.3.2 Electric vehicle charging space (EV space) dimensions.** The EV spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).
2. The minimum width of each EV space shall be 9 feet (2743 mm).

**4.106.4.3.3 Single EV space required.** When a single EV space is required, it shall be an EVSE Installed space.

**4.106.4.3.4 Multiple EV spaces required.** When multiple EV spaces are required per Table 4.106.4.3.1, the corresponding number of EVSE Installed spaces are required to be installed at the time of construction. The remainder of the EV spaces required per Table 4.106.4.3.1 may be EVSE Installed, EVSE Ready, or EVSE Capable spaces.

**4.106.4.3.4.1 Construction documents.** Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide

- A. Section 5.102 of the California Green Building Standards Code is amended to read as follows:

**SECTION 5.102 DEFINITIONS**

**5.102.1 Definitions.** The following terms are defined in Chapter 2.

CUTOFF LUMINAIRES.

EVSE CAPABLE.

EVSE INSTALLED.

EVSE READY.

LOW-EMITTING AND FUEL EFFICIENT VEHICLES.

NEIGHBORHOOD ELECTRIC VEHICLES.

TENANT-OCCUPANTS.

VANPOOL VEHICLE.

ZEV.

- B. Section 5.106.5.3 of the California Green Building Standards Code is amended to read as follows:

**5.106.5.3 Electric vehicle (EV) charging.** [N] Construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate installation and future installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the California Building Code, the California Electrical Code and as follows:

**5.106.5.3.1 Single charging space requirements.** [N] When only a single charging space is required per Table 5.106.5.3.3, one EVSE Installed space shall be installed in accordance with the California Electrical Code.

**5.106.5.3.2 Multiple charging space requirements.** [N] When multiple EV spaces are required per Table 5.106.5.3.3, the corresponding number of EVSE Installed spaces are required to be installed at the time of construction and shall be installed in accordance with the California Electrical Code. The remainder of the EV spaces required per Table 5.106.5.3.3 may be EVSE Installed, EVSE Ready, or EVSE Capable spaces.

**5.106.5.3.2.1 Construction documents.** Construction plans and specifications shall include, but are not limited to, the following:

1. The type and location of the EVSE.
2. The raceway(s) shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into listed suitable cabinet(s), box(es), enclosure(s) or equivalent.
3. Plan design shall be based upon 40-ampere minimum branch

described in Section 5.106.5.2 Designated parking for clean air vehicles.

**Notes:**

1. The California Department of Transportation adopts and publishes the California Manual on Uniform Traffic Control Devices (California MUTCD) to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives number 13-01. [www.dot.ca.gov/hq/traffops/policy/13-01.pdf](http://www.dot.ca.gov/hq/traffops/policy/13-01.pdf).
2. See Vehicle Code Section 22511 for EV charging spaces signage in off-street parking facilities and for use of EV charging spaces.
3. The Governor's Office of Planning and Research published a Zero-Emission Vehicle Community Readiness Guidebook which provides helpful information for local governments, residents and businesses. [www.opr.ca.gov/docs/ZEV\\_Guidebook.pdf](http://www.opr.ca.gov/docs/ZEV_Guidebook.pdf).

**EFFECTIVE DATE:** This ordinance shall be effective thirty days following its adoption; and the City Clerk shall certify the adoption of this ordinance and cause the full text of the ordinance or a summary of the ordinance prepared by the City Attorney to be published at least once in a newspaper of general circulation in the City of Carlsbad within fifteen days after its adoption.

**INTRODUCED AND FIRST READ** at a Regular Meeting of the Carlsbad City Council on the 26<sup>th</sup> day of February 2019, and thereafter

**PASSED, APPROVED AND ADOPTED** at a Regular Meeting of the City Council of the City of Carlsbad on the 12<sup>th</sup> day of March 2019, by the following vote, to wit:

**AYES:** Hall, Blackburn, Bhat-Patel, Schumacher, Hamilton.

**NOES:** None.

**ABSENT:** None.

**APPROVED AS TO FORM AND LEGALITY:**

  
CELIA A. BREWER, City Attorney



  
MATT HALL, Mayor

  
for BARBARA ENGLESON, City Clerk  
(SEAL)



temperatures have increased by more than 1°F in many parts of the state, with some areas (including the San Diego region) exceeding 2°F.<sup>2</sup> This heating is expected to continue well into the future, with estimates ranging between 4-6°F and 7-9°F by the end of the century.<sup>3</sup>

**T** This amendment is justified on the basis of a local **topographical** condition. Carlsbad has six and a half miles of beaches, three lagoons, several creeks and other low-lying areas prone to flooding. The San Diego Multi-jurisdictional Hazard Mitigation Plan ranks coastal storm, erosion and flooding among the top five hazards for Carlsbad, with potential property loss exposure approaching \$200 million dollars.<sup>4</sup> There is broad scientific consensus that the earth will continue to warm and that sea levels will rise as a result of thermal expansion of the oceans and increased contributions from melting glaciers. By the end of the century, sea level could rise by 1.7 to 6.6 feet, inundating beaches and impacting miles of roads and public accesses, the state campgrounds, hundreds of properties, and more than 1,000 acres of environmentally sensitive lands in Carlsbad.<sup>5</sup>

**E** This amendment is justified on the basis of local **environmental** conditions. Sustainability is a core value of the Community Vision, and an intrinsic part of the Carlsbad General Plan. Energy efficiency enhances the public health and welfare by promoting the environmental and economic health of the city through incorporating green practices into the design, construction, maintenance and operation of new and existing buildings. Providing charging infrastructure for electric vehicles will reduce air pollution and GHG emissions by facilitating increased use of zero emission vehicles.

The amendments to the California Green Building Standards Code are reasonably necessary to achieve the following goals of the General Plan Sustainability Element and Carlsbad Climate Action Plan:

- Promote energy efficiency and conservation in the community;
- Pursue the use of sustainable energy sources;
- Reduce the community's greenhouse gas emissions and foster green development patterns;
- Maintain a long-term balance among environmental, social and economic concerns, to ensure a vibrant, healthy and prosperous community.

The above-listed conditions within the city pose local hazards for which amendments to the California Green Building Standards Code are required. Human activities that release heat-trapping greenhouse gases into the atmosphere (such as through fossil fuel combustion) are the primary driver of climate change.<sup>6</sup> Failure to address and

<sup>2</sup> Bedsworth, Louise, Dan Cayan, Guido Franco, Leah Fisher, Sonya Ziaja. (California Governor's Office of Planning and Research, Scripps Institution of Oceanography, California Energy Commission, California Public Utilities Commission). 2018. *Statewide Summary Report*. California's Fourth Climate Change Assessment, p. 22.

<sup>3</sup> *San Diego Summary Report*, p. 19.

<sup>4</sup> 2017 San Diego Multi-jurisdictional Hazard Mitigation Plan, Table 5.3-1.


<sup>5</sup> City of Carlsbad. December 2017. Sea Level Rise Vulnerability Assessment, Table 7, p. 44.

<sup>6</sup> U.S. Global Research Program. Fourth National Climate Change Assessment,

STATE OF CALIFORNIA       )  
COUNTY OF SAN DIEGO     ) ss.

I, Sherry Freisinger, Deputy City Clerk of the City of Carlsbad, County of San Diego, State of California, hereby certify that I have compared the foregoing copy with the original ORDINANCE NO. CS-349, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CARLSBAD, CALIFORNIA, AMENDING CARLSBAD MUNICIPAL CODE CHAPTER 18.21 REGARDING REQUIREMENTS FOR ELECTRIC VEHICLE CHARGING INFRASTRUCTURE FOR NEW AND EXISTING RESIDENTIAL BUILDING SITES AND NEW NONRESIDENTIAL BUILDING SITES, PROJECT NO. MCA 17-0002 (PUB17Y-0013), on file in the Office of the City Clerk of the City of Carlsbad; that the same contains a full, true and correct transcript therefrom and of the whole thereof.

Witness my hand and the seal of said City of Carlsbad, this 13<sup>TH</sup> day of March 2019.

  
\_\_\_\_\_  
SHERRY FREISINGER  
Deputy City Clerk

(SEAL)

